

EXHIBIT L

1 UNITED STATES DISTRICT COURT
2 NORTHERN DISTRICT OF CALIFORNIA
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5 OYSTER OPTICS, LLC,

6 Plaintiff,
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8 vs.
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10 CIENA CORPORATION,

11 Defendant.
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CASE NO. 4:17-cv-05920-JSW

**DECLARATION OF RICHARD
GITLIN, SC.D. IN SUPPORT OF
CIENA'S PRELIMINARY CLAIM
CONSTRUCTIONS**

1 I, Dr. Richard Gitlin, a resident of La Jolla, California who is over 18 years of age, hereby declare
2 as follows.

3 **I. INTRODUCTION**

4 I have been retained as an expert in the above captioned case by Ciena Corporation
5 (“Ciena”). I understand that Oyster Optics, LLC has asserted three patents in this case: U.S.
6 Patent Nos. 7,620,327 (the “’327 patent”); 8,374,511 (the “’511 patent”); and 8,913,898 (the
7 “’898 patent”) (collectively the “Asserted Patents”). I understand that these patents are involved
8 in a claim construction proceeding.

9 I have been asked to consider and opine on claim constructions for the following disputed
10 claim terms: “phase modulate” and “phase modulator” (’327 patent cl. 3, 16, 27, 37; ’511 patent
11 cl. 9; ’898 patent cl. 3 and 17), “the optical signals” (’327 patent cl. 1, 14, 25, 36), and “the
12 plurality of thresholds” (’327 patent cl. 22, 33; ’898 patent cl. 23).

13 In forming my opinions, I have considered the patent specifications, claims, prosecution
14 histories, various books and journals, and my experience in the field of optical
15 telecommunications networks. I reserve the right to consider additional materials as I become
16 aware of them and to revise my opinions accordingly.

17 I am being compensated for my work at my usual consulting rate of \$675 per hour for my
18 time spent on this proceeding. I am also being reimbursed for reasonable and customary
19 expenses associated therewith. No part of my compensation is dependent upon the results of this
20 litigation or the substance of my testimony.

21 **II. EDUCATION AND EXPERIENCE**

22 Below, I have summarized my educational background, career history, publications, and
23 other relevant qualifications. My full *curriculum vitae* is attached as Appendix A to this report.

24 **A. Educational Background**

25 I received a Bachelor’s Degree (with honors) in electrical engineering from the City
26 College of New York, and a Master of Science in electrical engineering and a Doctor of
27 Engineering Science from Columbia University. I am currently a Distinguished University
28 Professor, Emeritus at the University of South Florida (“USF”). From August 2008 to August

1 2019, I was a State of Florida 21st Century Scholar, Distinguished University Professor, and the
2 Agere Systems Endowed Chaired Professor of Electrical Engineering at USF. I have more than
3 50 years of experience in the field of telecommunications. Throughout my career, I have
4 managed and led research in wireline and wireless systems, broadband data, and optical
5 networking, with additional experience in multimedia communications, and various access
6 technologies including wireless, twisted pair, coaxial cable, and fiber optic networks.

7 **B. Career**

8 After receiving my doctorate from Columbia University in 1969, I joined Bell
9 Laboratories (“Bell Labs”), which at the time was part of the Bell System, and eventually became
10 AT&T Bell Labs, and then became Lucent Technologies-Bell Labs, then Alcatel-Lucent Bell
11 Labs, and now Nokia Bell Labs. I was with Bell Labs in its various instantiations for 32 years.
12 My first assignment was in the data communications (“modem”) area and, during this time, I
13 contributed to the invention of many key modem technologies. I was also involved in product
14 realization, standardization, and the introduction of several modem products. I was the leader of
15 the V.32 modem development team in the early 1980s, and I assembled the team that developed
16 the V.34 modem, and I was a co-inventor of Digital Subscriber Line (“DSL”) technology in 1985-
17 1986.

18 In 1987, I moved to Bell Labs research to lead research on wireless systems, high-speed
19 (broadband) packet switching, optical networking, and related areas. I held several senior
20 executive positions in Bell Labs, and one of these positions was Senior Vice President for
21 Communication Sciences Research. In this position, included in my responsibilities were all of
22 Bell Labs wireless communications research projects, for both cellular and wireless local area
23 network (“WLAN” or WiFi) systems, as well as wireline networking, and optical
24 communications.

25 I led the effort to advance high-speed optical transmission systems by introducing and
26 building on techniques that were well established in radio frequency (RF) communication
27 systems, and in particular in wireless communications. Examples of my contributions to optical
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1 communications and networking include advanced modulation formats, line coding, enhanced
2 forward error correction (FEC), equalization, optical multiple access networks, and introducing
3 other digital signal processing techniques into optical systems. The adoption and extension of
4 these techniques from the Mb/s regime into the multi-Gb/s realm was driven by the desire to
5 steadily lower the cost per end-to-end networked information bit in an environment of
6 continuously increasing data traffic.

7 In this leadership position, I oversaw over 500 professionals, many of whom were
8 involved in wireless communications and optical network research. I established and oversaw the
9 Bell Labs research group located in Utrecht, The Netherlands that was focused on creating
10 WLAN technology. In addition, I oversaw a cellular wireless research group located in Swindon,
11 UK. The Bell Labs research groups working on wireless research in the United States also
12 reported to me and included several researchers working on OFDM and multiple-input and
13 multiple-output (“MIMO”).

14 I was also the Chief Technical Officer (CTO) and Vice President R&D of the Data
15 Networking Systems Business Unit, where I was responsible for product development,
16 architecture and systems engineering, standards, and advanced development for data networking
17 products including many broadband networking activities in packet and optical networking. This
18 included the ATLANTA ATM chipset, Globeview—the world’s first 20 gigabit/sec ATM switch
19 (that used the ATLANTA chipset), wire-speed and quality of service (QoS)-aware IP routers and
20 switches, multi-code technology for CDMA wireless data (IS-95B), and the BLAST wireless
21 technology based on advanced spatial-domain (MIMO smart antenna) processing.

22 In addition to my responsibilities at Bell Laboratories and Lucent Technologies, from
23 1999 to 2001, I was a Visiting Professor of Electrical Engineering at Columbia University, where
24 I taught courses, conducted research, and supervised doctoral students in the area of
25 communications and wireless networking. From 2001 to 2003, I was also an Adjunct Professor
26 of Electrical Engineering at Columbia University.

1 From 2001 to 2004, I was Vice President, Technology and Chief Technical Officer of
2 NEC Laboratories America, Inc., where I had specific responsibility for wireless networking,
3 broadband and IP systems, system LSI, quantum communications, and bio-informatics.

4 From 2002 to 2005, I served on the Board of Directors of PCTEL, a NASDAQ company
5 (PCTI) focused on wireless technologies.

6 From 2005 to 2008, I was Chief Technical Officer of Hammerhead Systems, a Silicon
7 Valley venture-funded start-up and market leader in providing innovative data networking
8 solutions for wireline, wireless, and cable service providers. At Hammerhead Systems, I was
9 responsible for product-line vision and system architecture, developing core technologies, and
10 representing product technology and directions with customers, partners, and standards bodies.

11 In 2008, I joined USF. At USF I focused my research on 4G and 5G wireless systems and
12 the Internet of Things (IoT), as well as at the intersection of wireless communications and
13 networking with medicine to advance minimally invasive surgery and other cyber-physical health
14 care systems. I taught graduate courses in Digital Communications, Wireless Networking, and
15 Random Processes. I retired from USF in August, 2019.

16 Throughout my career, I have held various membership and leadership positions in
17 various engineering organizations and I have received several significant professional awards and
18 honors. In 1986-1987, I was named a Fellow of the IEEE and also an AT&T Bell Laboratories
19 Fellow. In 2005, I was elected to the U.S. National Academy of Engineering (“NAE”), and I was
20 also a co-recipient of the Thomas Alva Edison patent award. I am also a Charter Fellow (2012) of
21 the National Academy of Inventors (“NAI”). In 2017, I was inducted into the Florida Inventors
22 Hall of Fame, and in 2019 I was an inaugural member of the Academy of Sciences, Engineering
23 and Medicine of Florida.

24 I served as the Chair of the Communication Theory Committee of the IEEE
25 Communications Society (COMSOC), as a member of the COMSOC Awards Board, the Editor
26 for Communications Theory of the IEEE Transactions on Communications, as a member of the
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1 Board of Governors of the IEEE Communications Society, and as a member of the Nominations
2 and Elections Board.

3 I also served on the Advisory Committee for Computer Science and Engineering (“CISE”)
4 of the National Science Foundation. I was a founding Editorial Board member of the Bell Labs
5 Technical Journal, and I have served on the Editorial Boards of Mobile Networks and
6 Applications and the Journal of Communications Networks.

7 **C. Patents, Publications, and Presentations**

8 I am a named inventor on 71 issued United States patents and am the author or co-author
9 of over 170 journal and conference peer-reviewed articles. A list of publications, including my
10 71 issued patents is included in my CV (Appendix A). I also co-authored a graduate text on Data
11 Communications, “Data Communications Principles,” published by Plenum in 1992. I have also
12 given keynote presentations at numerous premier IEEE conferences, such as COMCAS 2019
13 (November 2019), WAMICON 2016, Wireless Communications and Networking Conference
14 2015 (“WCNC 2015”), Wireless Telecommunications Symposium 2015 (“WTS 2015”),
15 Mobicom 2004, Wireless Communications and Networking Conference 2003 (“WCNC 2003”),
16 and the Wireless Telecommunications Symposium 2010 (“WTS 2010”).

17 I am the co-recipient of three prize paper awards including the 1995 IEEE
18 Communications Society’s Steven O. Rice Award, the 1994 IEEE Communications Society’s
19 Frederick Ellersick Award, and the 1982 Bell System Technical Journal Award.

20 **III. PERSON OF ORDINARY SKILL IN THE ART**

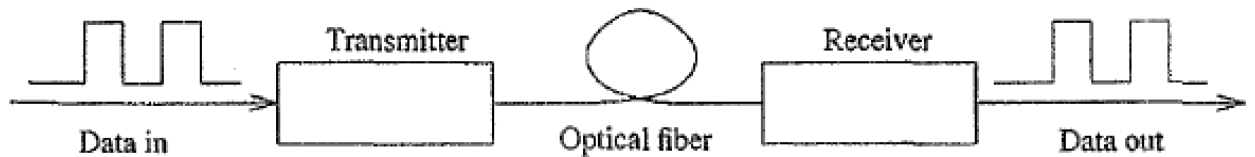
21 I was asked to provide my opinion on the level of one of ordinary skill in the art with
22 respect to the invention of the Asserted Patents as of the early 2001s (up to and including July 9,
23 2001). I understand that the person having ordinary skill in the art is a hypothetical person who is
24 presumed to know the relevant prior art. I further understand the factors that may be considered
25 in determining the level of skill include: the types of problems encountered in the art, prior art
26 solutions to those problems; rapidity with which innovations are made; sophistication of the
27 technology; and educational level of active workers in the field. I understand that not all such
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1 factors may be present in every case, and one or more of them may predominate. Based on my
2 review of the types of problems encountered in the field of optical networking ('511 patent at
3 1:16–18, 2:21–27), prior solutions to those problems, the rapidity with which innovations were
4 made, the sophistication of the technology, and the educational level of active workers in the
5 field, I believe a person of ordinary skill in art would have had at least a B.S. in Electrical
6 Engineering or a related field with at least five years of experience in designing optical
7 transmission systems, or an M.S. in Electrical Engineering or a related field. More education can
8 supplement practical experience and vice versa. Depending on the engineering background and
9 level of education of a person, it would have taken a few years for the person to become familiar
10 with the problems encountered in the art and become familiar with the prior and current solutions
11 to those problems.

12 All of my opinions in this declaration are from the perspective of one of ordinary skill in
13 the art, as I have defined it here, during the relevant timeframe, i.e., early 2001 up to and
14 including July 9, 2001.

15 **IV. BACKGROUND: FIBER OPTIC COMMUNICATION SYSTEMS OVERVIEW**

16 The following is a brief overview of optical networking technologies and concepts known
17 to one of ordinary skill in the art during the relevant timeframe of the Asserted Patents. Optical
18 network communication systems were known and used prior to July 2001. *See e.g.*, '511 patent
19 at 1:20–2:18. In fact, in early 2001 up to and including the filing date of the provisional
20 application No. 60/303,932, on July 9, 2001, one of ordinary skill in the art would have
21 understood that typical optical network communication systems included components such as a
22 transmitter, an optical fiber and a receiver. These optical communication systems are sometimes
23 called “lightwave” systems to distinguish them from microwave, or wireless, systems. I’ve
24 excerpted a high-level diagrammatic lightwave system from my textbook, *Data Communication*
25 *Principles*, which was published in 1992.



Gitlin, et al., Data Communication Principles at 53 (Plenum Press 1992) attached as Ex. A. As shown in this diagrammatic example, optical networks were known to consist of a transmitter, a fiber transmission medium, and a receiver. *Id.*

In a common mode, dubbed amplitude modulation, the transmitter receives electronic input data, e.g., a stream of zeros and ones, and converts the input data to on-off light pulses representing a stream of zeros and ones. *Id.* The light pulses are sent from the transmitter over the optical fiber to a receiver. *Id.* As the Asserted Patents explain, the received light pulses “either produce an electric output at the photodiode or they do not. As a result, an output electronic data stream of zeros and ones is generated.” ’327 patent at 1:36-39. In other words, the receiver recovers the data stream of zeros and ones transmitted by the transmitter.

In such known systems, a laser was the typical choice for a light source in a fiber optic communication transmitter. The information to be transmitted across the fiber optic channel of the communication system would have been encoded onto the light emitted from the laser. The process of encoding a light beam with information in such systems was also known as modulation. It was known that typical transceiver cards included a transmitter, e.g., a laser and components for modulating the laser light, and a receiver that converts the light from optical to electronic form to recover the data carried by the light.

V. OVERVIEW OF THE ASSERTED PATENTS

The Asserted Patents share a common specification and figures and are each entitled “Fiber Optic Telecommunications Card with Energy Level Monitoring.” The Asserted Patents are generally directed to optical networking. ’511 patent at 1:16–18, 2:21–27, 6:51-52, 7:20-21. According to the Asserted Patents, existing “systems have the disadvantage that the fiber can be

1 easily tapped and are not secure.” *Id.* at 1:50–51. Therefore, the Asserted Patents describe the
2 invention as “providing secure optical data transmission over optical fiber” by using “tapping
3 detection capabilities.” *Id.* at 2:21–27.

4 The background of the Asserted Patents frames the problem to be solved as the
5 vulnerability of optical fiber to security breaches through optical taps: “Existing amplitude
6 modulated systems have the *disadvantage* that the fiber can be easily tapped and are not secure.”
7 ’898 patent at 1:52-53. The Asserted Patents’ Summary of the Invention states “[t]he present
8 invention thus permits a card-based transmission system incorporating an energy level detector
9 for optical tap detection.” *Id.* at 3:9-13. The Summary further explains that “an object of the
10 present invention is to provide a transceiver card for providing secure optical data transmission
11 over optical fiber. Another alternative or additional object of the present invention is to provide
12 . . . tapping detection capabilities.” *Id.* at 2:24-29.

13 The Asserted Patents solve the problem of easily tapped fibers by using a transceiver that
14 “operates in a phase-modulated mode” because “the phase-modulated signals have the advantage
15 that breach detection by the energy level detector work more effectively, since the amplitude of
16 the optical signal is constant and thus a drop in the optical signal level is more easily detected.”
17 *Id.* at 4:44-52, my emphasis.

18 My understanding is confirmed by a 2002 white paper by the original patentee, Oyster
19 Optics, Inc.’s (not to be confused with the plaintiff Oyster Optics, LLC), which describes Oyster
20 Inc.’s technology. The paper explains, “with the initial introduction of fiber optic
21 telecommunications systems came the belief that fiber-based transmissions are inherently secure.”
22 Ex. B at 1. But, “contrary to popular belief, fiber optic telecommunications systems are
23 extremely vulnerable to being tapped and few private or public network operators, if any, can
24 claim that their networks are ‘tap free’ or protected even minimally from optical tapping
25 methods.” *Id.* at 2. The paper goes on to explain that Oyster Inc. “developed and patented
26 groundbreaking optical security, monitoring, intrusion detection and breach localization
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1 solutions.” *Id.* at 10. In other words, this paper described the problem of optical tapping that
2 Oyster Inc. intended to overcome with the Asserted Patents.

3 Oyster Inc. believed that nefarious intruders “wish to extract as much information for as
4 long as possible for a specific financial or political gain and with the goal of *not* being detected or
5 caught.” *Id.* at 2. Oyster Inc.’s patented solution, as described in its paper, was to leverage the
6 phase modulation format, *having constant amplitude*, to allow for a tap detection system:

7 [T]he light transmitting the data is in a patented secure phase
8 modulated format different from any commercially available
9 products. Because of the format of the light, Oyster Optics’
10 technologies are therefore able to provide an extremely precise and
sensitive tap detection system, which ***would not function with
existing common equipment utilizing insecure amplitude or
intensity modulated signals.***

11 *Id.* at 14, my emphasis. It is my opinion that Oyster Inc.’s paper is describing the problem and
12 solution also described in the Asserted Patents. Namely, utilizing a type of phase modulation
13 where the amplitude remains constant and detecting taps by identifying drops in the signals
14 amplitude. *See, e.g.*, ’327 patent at 5:6-14 (an amplitude drop may indicate a tap).

15 **VI. CLAIM TERMS**

16 **A. Phase Modulate/Phase Modulator** 17 **’327 patent (in claims 3, 16, 27, and 37), the ’511 patent (in claim 9), and the** 18 **’898 patent (in claims 3 and 17)**

19 A person of ordinary skill in the art (a POSITA) would have understood the “phase
20 modulate/phase modulator” terms to mean altering the phase of light while keeping the amplitude
21 of the light constant to create an optical signal having a phase that is representative of the data.
22 The device that accomplishes this modulation is called a phase modulator. This is clear from how
23 this term is used in the Asserted Patents in suit and as described in standard references. The
24 Asserted Patents describes the terms and benefits of phase modulate/phase modulator as follows:

25 The transceiver of the present invention preferably operates in a
26 phase-modulated mode The phase-modulated signals have the
27 advantage that breach detection by the energy level detector work
28 more effectively, ***since the amplitude of the optical signal is
constant*** and thus a drop in the optical signal level is more easily
detected.

1 '898 patent at 4:42-50, my emphasis. Likewise, when phase modulation is used, the Asserted
2 Patents never refer to a modulation format that includes amplitude modulation. Rather, they
3 positively recite that the amplitude is constant as an “amplitude drop . . . may indicate at tap”
4 *See, e.g.*, '327 patent at 5:6-14. The Asserted Patents describe an amplitude modulated mode and
5 a phase modulated mode, but do not describe modulating both amplitude and phase at the same
6 time. '898 patent at 4:35-36 (“a modulator 16, for example an amplitude *or* phase modulator”);
7 4:44-45 (“The transceiver of the present invention preferably operates in a phase-modulated
8 *mode*”), my emphasis. A POSITA reading the Asserted Patents would have understood that the
9 constant amplitude characteristic of the phase modulated signals is important to making the
10 signals secure while in transit.

11 The Asserted Patents emphasize that a modulation format having a *constant* amplitude
12 prevents an intruder from being able to use a simple photodetector to intercept communications
13 by tapping the optical fiber. Specifically, the Asserted Patents explain, “[e]xisting amplitude
14 modulated systems have *the disadvantage that* the fiber can be easily tapped and are not secure.”
15 '898 pat. 1:52-53. These disclosures tell a POSITA that allowing the signal’s amplitude to vary
16 with the data would expose the data to photodiode optical taps, frustrating the invention’s ability
17 to provide secure, phase modulated optical data transmission. The claims are consistent with the
18 above excerpts from the specification.

19 At the time of the Asserted Patents, it is my opinion that the “phase modulate” terms as
20 used in the Asserted Patents would have been understood to mean altering the phase of light
21 while keeping the amplitude of the light constant to create an optical signal having a phase that is
22 representative of data.

23 **B. The Optical Signals**
24 **'327 patent (in claims 1, 14, 25, 36)**

25 A POSITA would have understood that “the optical signals,” as claimed, refers to the
26 claimed “transmitting optical signals.” And, absent referring to transmitted optical signals, a
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1 POSITA would not know what “the optical signals” refers to in the ’327 patent’s claims. The
2 ’327 patent claims “the optical signals” as follows:

3 1. A transceiver card for a telecommunications box for transmitting
4 data over a first optical fiber and receiving data over a second
optical fiber, the card comprising:

5 a transmitter for transmitting data over the first optical fiber, the
6 transmitter having a laser, a modulator, and a controller receiving
input data and controlling the modulator as a function of the input
7 data, the transmitter *transmitting optical signals* for
telecommunication as a function of the input data;

8 . . .

9 an energy level detector optically connected between the receiver
10 and the fiber input to measure an energy level of *the optical signals*,
wherein the energy level detector includes a plurality of thresholds.

11 *Id.* at claim 1, my emphasis.

12 14. A transceiver card for a telecommunications box for
13 transmitting data over a first optical fiber and receiving data over a
second optical fiber, the card comprising:

14 a transmitter for transmitting data over the first optical fiber, the
15 transmitter having a laser, a modulator and a controller receiving
input data and controlling the modulator as a function of the input
16 data, the transmitter *transmitting optical signals* for
telecommunication as a function of the input data;

17 . . .

18 an energy level detector optically connected between the receiver
19 and the fiber input input (sic) to measure an energy level of *the*
optical signals, the energy level detector including a threshold
20 indicating a drop in amplitude of a phase-modulated signal.

21 *Id.* at claim 14, my emphasis.

22 25. A transceiver card for a telecommunications box for
23 transmitting data over a first optical fiber and receiving data over a
second optical fiber, the card comprising:

24 a transmitter for transmitting data over the first optical fiber, the
25 transmitter having a laser, a modulator and a controller receiving
input data and controlling the modulator as a function of the input
26 data, the transmitter *transmitting optical signals* for
telecommunication as a function of the input data;

27 . . .
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1 an energy level detector to measure an energy level of *the optical*
2 *signals*, the energy level detector including a threshold indicating a
drop in amplitude of a phase-modulated signal.

3 *Id.* at claim 25, my emphasis.

4 36. A transceiver card for a telecommunications box for
5 transmitting data over a first optical fiber and receiving data over a
second optical fiber, the card comprising:

6 a transmitter for transmitting data over the first optical fiber, the
7 transmitter having a laser, a modulator and a controller receiving
input data and controlling the modulator as a function of the input
8 data, the transmitter *transmitting optical signals* for
telecommunication as a function of the input data;

9 . . .

10 a splitter to split at least a portion of *the optical signals* to form a
11 split optical signal, . . .

12 *Id.* at claim 36, my emphasis.

13 A POSITA would have understood that the transmitted “optical signals” is the antecedent
14 basis for “the optical signals” because there are no other optical signals claimed. In each
15 independent claim, prior to the recitation of “the optical signals,” there is only one introduction of
16 an element as “optical signals.” That element is the “optical signals” transmitted by the
17 transmitter. Nothing else is expressly introduced as “optical signals.” Thus, a POSITA would
18 have understood that there is antecedent basis for “the optical signals.” A POSITA would have
19 understood that the “optical signals” transmitted by the claimed transmitter is the antecedent basis
20 for “the optical signals” as claimed. A POSITA would not know what “the optical signals” refers
21 to in the ’327 patent’s claims if they do not refer to the claimed “transmitting optical signals.”

22 **C. The Plurality of Thresholds**
23 **’327 patent (in claims 22, 33)**
’898 patent (in claim 23)

24 A POSITA would not have understood what “the plurality of thresholds” refers to in
25 claims 22 and 33 of the ’327 patent and claim 23 of the ’898 patent. Those claims are listed
26 below.

1 14. A transceiver card for a telecommunications box for
2 transmitting data over a first optical fiber and receiving data over a
3 second optical fiber, the card comprising:

4 ...

5 an energy level detector optically connected between the receiver
6 and the fiber input input (sic) to measure an energy level of the
7 optical signals, the energy level detector including *a threshold*
8 indicating a drop in amplitude of a phase-modulated signal.

9 22. The card as recited in claim 14 wherein *the plurality of*
10 *thresholds* bound an acceptable energy range for the received light.

11 *Id.* at claim 22, my emphasis.

12 25. A transceiver card for a telecommunications box for
13 transmitting data over a first optical fiber and receiving data over a
14 second optical fiber, the card comprising:

15 ...

16 an energy level detector to measure an energy level of the optical
17 signals, the energy level detector including *a threshold* indicating a
18 drop in amplitude of a phase-modulated signal.

19 33. The card as recited in claim 25 wherein *the plurality of*
20 *thresholds* bound an acceptable energy range for the received light.

21 *Id.* at claim 33, my emphasis.

22 14. A transceiver card for a telecommunications box for
23 transmitting data over a first optical fiber and receiving data over a
24 second optical fiber, the transceiver card comprising:

25 ...

26 an energy level detector configured to measure an energy level of
27 the second optical signal, the energy level detector including *a*
28 *threshold* indicating a drop in amplitude of the second optical
signal.

29 23. The transceiver card as recited in claim 14 wherein *the plurality*
30 *of thresholds* bound an acceptable energy range for the received
31 second optical signal.

32 '898 patent claim 23, my emphasis.

33 A person of ordinary skill in the art would not have understood what "the plurality of
34 thresholds" is referring to because there is no antecedent basis for this term. The closest
35 antecedent basis is "a threshold" which does not indicate "a plurality of thresholds" to a POSITA.

1 Nothing else is expressly introduced as “a plurality of thresholds.” Thus, a POSITA would not
2 have understood what is being referred to as “the plurality of thresholds.”

3 I declare under penalty of perjury that the foregoing is true and correct.
4

5 Dated: February 10, 2020

By: Richard D. Gitlin
6 Dr. Richard Gitlin
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